CLAIMS

What is claimed is:

1. A paper feeding device of an inkjet printer comprising:

a motor generating a drive force;

a pickup drive shaft rotated by the motor;

a pivoting link housing pivotably disposed on the pickup drive shaft;

a pickup roller connected to the link housing; and

a clutch enlinking the pickup drive shaft and the link housing enabling the link housing to pivot by a predetermined angle by rotation of the pickup drive shaft.

2. The paper feeding device of an inkjet printer according to claim 1, wherein the clutch comprises:

a fixing member on the pickup drive shaft and in contact with one side of an outer surface of the link housing; and

a press on the pickup drive shaft, pressing the link housing towards the fixing member.

3. The paper feeding device of an inkjet printer according to claim 2, wherein the press comprises:

a pressing plate around the pickup drive shaft; and

a pressing spring between the pressing plate and the other side of the outer surface of the link housing.

4. The paper feeding device of an inkjet printer according to claim 2, wherein the press comprises:

a pressing plate fixed around the pickup drive shaft; and

a rubber plate between the pressing plate and the other side of the outer surface of the link housing.

5. The paper feeding device of an inkjet printer according to claim 2, further comprising an abrasion prevention member on the other side of the outer surface of the link housing, which contacts the press.

6. The paper feeding device of an inkjet printer according to claim 1, wherein the clutch comprises:

an inner race on an outer surface of the pickup drive shaft; and

an outer race in the link housing in contact with an outer surface of the inner race with a predetermined frictional force.

7. The paper feeding device of an inkjet printer according to claim 1, wherein the link housing comprises:

a pickup drive gear to drive the pickup roller;

a first link housing on the pickup drive shaft to cover the pickup drive gear on the pickup drive shaft; and

a second link housing in the first link housing to pivot by a predetermined angle and having a pickup roller gear geared with the pickup drive gear rotating the pickup roller.

8. A paper feeding device, comprising:

a bi-directionally rotatable pickup drive shaft;

a pivoting link housing, driven in first and second directions by the pickup drive shaft, and

a pickup roller connected to the link housing and coupled to the pickup drive shaft; wherein

when pickup drive shaft rotates in a first direction and the pickup roller comes in contact with paper, the link housing is prevented from pivoting, a slip occurs between the link housing and the rotating pickup drive shaft, and the pickup drive shaft forces the pickup roller to engage, and

when the pickup drive shaft rotates in the second direction, frictional contact between the link housing and the pickup drive shaft causes the link housing to pivot a second predetermined angle about the pickup drive shaft such that the pickup roller is removed from contact with the paper.

9. The paper feeding device as set forth in claim 8, further comprising a clutch which links the link housing and the pickup drive shaft.

10. The paper feeding device as set forth in claim 9, wherein the clutch comprises:

an inner race on an outer surface of the pickup drive shaft, and

an outer race in the link housing in frictional contact with an outer surface of the inner race.

11. The paper feeding device as set forth in claim 9, wherein the clutch comprises:

a fixing member on the pickup drive shaft in contact with a first outer surface of the link housing; and

a press on the pickup drive shaft pressing the link housing towards the fixing member.

12. The paper feeding device as set forth in claim 11, wherein the press comprises:

a fixed plate around the pickup drive shaft, and

a spring between the plate and a second outer surface of the link housing.

13. The paper feeding device as set forth in claim 11, wherein the press comprises:

a fixed plate around the pickup drive shaft, and

a rubber plate between the plate and the second outer surface of the link housing.

14. The paper feeding device as set forth in claim 11, further comprising an abrasion prevention member on a second outer surface of the link housing and in contact with the press.

15. A paper feeding device of an inkjet printer, comprising:

a motor generating a drive force;

a bi-directionally rotatable pickup drive shaft coupled to the motor;

a pivoting link housing, driven in first and second directions by the pickup drive shaft, and

a pickup roller connected to the link housing and coupled to the pickup drive shaft; wherein

when the pickup drive shaft rotates in a first direction and the pickup roller comes in contact with paper, the link housing is prevented from pivoting, a slip occurs between the link housing and the rotating pickup drive shaft, and the pickup drive shaft forces the pickup roller to engage, and

when the pickup drive shaft rotates in the second direction, frictional contact between the link housing and the pickup drive shaft causes the link housing to pivot a second predetermined angle about the pickup drive shaft such that the pickup roller is removed from contact with the paper.

16. The paper feeding device as set forth in claim 15, further comprising an abrasion prevention member on one side of the outer surface of the link housing and in contact with the press.